

MATERIALS TOWARD A MONOGRAPH OF THE GENUS LIPPIA. X

Harold N. Moldenke

LIPPIA UMBELLATA Cav.

Additional bibliography: Moldenke, Phytologia 13: 7 & 32—35. 1966.

On the other hand, the Hinton 12945 and S. S. White 5271, distributed as L. umbellata, are actually L. callicarpaefolia H.B.K.; P. C. Standley 20803 is L. cardiostegia Benth.; Heyde & Lux 4387 is L. controversa Moldenke; Holway 307 is L. costaricensis Moldenke; Edw. Palmer 479 [April to Nov. 1896] is the type collection of L. curtisiana Moldenke; Paray 3123 is L. durangensis Moldenke; Hurd 67 is L. gentryi Standl.; Balls B.5489, N. L. H. Krauss 858, and Rzedowski 6906 are L. hypoleia Briq.; H. S. Gentry 5662 and Mexia 1636 are L. jaliscana Moldenke; H. Pittier 5387 and R. S. Williams 151 are L. oxyphyllaria (Donn. Sm.) Standl.; Arsène 5293, Breedlove 1572, D. S. Correll 14396, Galeotti 787, H. S. Gentry 2037, J. Gonzalez Ortega 5707, Hinton 11717, 12949, & 13614, Mexia 458 1/2 & 1354, Edw. Palmer 479 [Oct. 1894 — March 1895], Rose, Standley, & Rose 14798, J. Rzedowski 15630 & 19280, and C. L. Smith 218 are L. pringlei Briq.; Ghiesbreght 634, Heyde & Lux 4389, Turckheim 8441, and S. S. White 5271 (in part) are L. substrigosa Turcz.; DeLeon 1618 & 1629, H. S. Gentry 5353, and Edw. Palmer 1969 are L. tepicana Moldenke (the latter is the type collection); and Gaumer & sons 23627 bis is L. yucatana Greenm.

In the Harvard University herbarium the following specimens are also filed under L. umbellata, but have not as yet been checked by me: MEXICO: Guerrero: E. W. Nelson 2285 (G), 2319 (G). Hidalgo: H. E. Moore 2000 (G). Michoacán: E. W. Nelson 6951 (G). Morelos: Seler & Seler 4309 (G). State undetermined: Berlandier 1028 [Cordillera da Guchilapa] (G); Halbinger 53 [Balsas] (G). GUATEMALA: Huehuetenango: Skutch 1080 (A). EL SALVADOR: San Salvador: Calderón 14 (G); P. C. Standley 19395 (G). Sonsonate: P. C. Standley 22181 (G).

In all, 140 herbarium specimens of L. umbellata have been examined by me.

Citations: MEXICO: Colima: McVaugh & Koelz 1069 (Mi). Federal District: Bourgeau 968 (Br, S); J. N. Couch M.126 (Hi—14509); Lyonnnet 457 (N); H. N. Moldenke 19853 (B, F, Mg, Mr, No); Moldenke & Moldenke 19853 (Bm, Bs, Es, Fy, Hk, Hw, Le, Lg, Lm, Mm, N, Ok, Ot, Rs, S, Sm, Sm, Ss, Ss, Z); Paray 2188 (Ip); Russell & Souviron 184 (Gg—237840, N). Guerrero: Langlassé 744 (Cb). Jalisco: R. Mc Vaugh 10070 (Mi), 11746 (Mi), 13425 (Mi), 13935 (Mi). México: L. N.

Goodding 2178 (Ca—130059, En—6170, I, N, S); Hinton 393 (N, N), 2099 (N, N), 2574 (K), 2918 (N, N), 7237 (K, N), 11910 (La), 13550 (La); M. E. Jones 747 (Po—68896); Matuda 18690 (N), 25831 (Cb); Paray 1349 (Ip); Pringle 11089 (Fs, Gg—421282, I, I, Mi, S, Vt); Purpus 1694 (Ca—139739, N, Po—64347). Michoacán: Ar-sène s.n. [Morelia, 4-12-1910] (B, Mi, N); Hinton 11910 (Au, It, Mi, N, Rf, Ur), 12791 (Mi, N, N, Rf), 13550 (Au, It, Mi, N, Rf, Ur), 15706 (N, N, Rf), 15707 (La); King & Soderstrom 5161 (Ca); E. W. Nelson 6564 (N); Pringle 3948 (Br, C, Ca—25123, Io—38730, Me, Me, Me, Mi, Mm—15407, Ob—50730, Pa, Pl—22594, Po—63856, S, Vt). Morelos: Fröderström & Hultén 308 (S); E. Lyonnet 1239 (W—1746023), 2838 (W—1790981); Pringle 7714 (I, Vt), 9129 (La, Vt), 11090 (Cm, It, N); Rowntree 300 (Fs); W. Trelease 246 (Ur). Nayarit: Edw. Palmer s.n. [Tepic, Jan.—Feb. 1892] (Cp). Oaxaca: Galeotti 795j (N, V); C. L. Smith 225 (Vi). Puebla: C. C. Deam 135 (G), s.n. [Ixtaccihautl, Jan. 5, 1899] (Mi). Sinaloa: H. S. Gentry 7222 (Ak—21642, Ca—946106, Mi, N); Edw. Palmer 1199 (Cp, Cp). Vera Cruz: Balls 5489 (W—1793856). State undetermined: Haenke 1588 (N); Quarles van Ufford 105 (Ut); Sessé, Mocino, Castillo, & Maldonado 2123 (Q), 2203 (Q), 2218 (Q), 2219 (Q, Q).

LIPPIA VELUTINA Schau. in A. DC., Prodr. 11: 576. 1847.

Synonymy: Lippia mollis Mart. ex Moldenke, Suppl. List Invalid Names 6, in syn. 1941.

Bibliography: Schau. in A. DC., Prodr. 11: 576. 1847; Schau. in Mart., Fl. Bras. 9: 226. 1851; Bocq., Adansonia 3: 245. 1863; Jacks. in Hook. f. & Jacks., Ind. Kew. 2: 96. 1894; Glaz., Bull. Soc. Bot. France 58, Mém. 3: 540. 1911; Moldenke, Suppl. List Invalid Names 6. 1941; Moldenke, Known Geogr. Distrib. Verbenac., [ed. 1], 38 & 96. 1942; Moldenke, Alph. List Invalid Names 31. 1942; Moldenke, Alph. List Cit. 2: 413 (1948), 3: 686, 693, 710, & 935 (1949), and 4: 1300. 1949; Moldenke, Known Geogr. Distrib. Verbenac., [ed. 2], 81 & 191. 1949; Moldenke, Phytologia 3: 305. 1950; Moldenke, Résumé 94, 314, & 463. 1959; Troncoso, Darwiniana 12: 260. 1961; Moldenke, Phytologia 12: 23, 47, 152, 170, 310, & 455. 1965.

Shrub, to 2 m. tall; branchlets subtetragonal, subpulverulent-glandular and appressed-tomentose; leaves decussate-opposite; petioles 6—8 mm. long; leaf-blades ovate-oblong or lanceolate, acute and not at all attenuate at the apex, very shortly apiculate at the tip, crenulate along the margins, acute at the base and contracted into the petiole, penninerved, flat, velutinous above, densely very short-tomentose with appressed hairs and canescence beneath, the lower ones on the branchlets 5—7.5 cm. long and 1.8—3 cm. wide, gradually decreasing in size upwards, the uppermost ones only 2.5 cm. long; secondaries 9—11, hardly impressed above, prominent beneath, the areoles not truly bullate; inflorescence subpulverulent-glandular and appressed-tomentose; pe-

duncles axillary, aggregate, flaccid, 8-12 mm. long, longer than the subtending petioles; heads tetraquetrous, subglobose, about 6 mm. in diameter, larger in fruit; bractlets subherbaceous, broadly ovate, acuminate at the apex, villous-ciliate, spreading, folded-recurved at the apex, shorter than the corolla-tube, connate below, canescent, in 4 series, the lower ones slightly larger; calyx short, ovate, unequally 4-dentate, hirtellous, ciliate; corolla hypocrateriform, yellowish, becoming greenish in drying, its tube 4 mm. long, slightly curvate, ventricose and pubescent below the mouth, the limb pubescent on the back, its lobes rounded, unequal, the lower slightly larger and subquadrate, retuse and mucronate at the apex, undulate along the margins; fruit closely invested by the persistent but not diphyllous calyx, ellipsoid, almost the size of a grain of millet (Panicum miliaceum L.), dark, shiny, usually only 1 seed developed and the other rudimentary.

This species was based by Schauer on a specimen collected in April by Antonio Luiz Patrício de Silva Manso [Herb. Martius 1024] at Morro do Ernesto, near Cujabá, Matto Grosso, Brazil, and on specimens collected by Johann Emanuel Pohl at São Isidro and at Corallingo, Goiás, Brazil, deposited in the Vienna, Munich, and DeCandolle herbaria. The first-mentioned of these is also the type collection of L. mollis and a specimen so labeled in the Delessert Herbarium at the Conservatoire et Jardin Botaniques at Geneva, originally inscribed "1098" on the label, was photographed by Macbride as his type photograph number 7861, as well as another of the same collection, labeled L. velutina, photographed by him as his type photograph number 24676.

Schauer (1847) places the species in his Section Goniostachyum and says "Proxime affinis L. salviaeefoliae, sed distincta statura validiora, foliis figura alienis, magis elongatis, utrinque acutis, haud rugosis, indumento brevissimo appresso neque laxo vestitis, ramealibus et subfloralibus majoribus." The flowers on Mendes Magalhães 4329 are described by the collector as "yellowish". Material has been misidentified and distributed in herbaria as L. origanoides H.B.K. On the other hand, the Glaziou 14157, distributed as L. velutina, is actually L. salviaeefolia Cham.

In all, 7 herbarium specimens, including type material of both names involved, and 11 mounted photographs have been examined by me.

Citations: BRAZIL: Matto Grosso: Silva-Manso s.n. [Morro do Ernesto; Herb. Martius 1024; Macbride photos 7861 & 24676] (Br—cotype, Br—cotype, F—photo of cotype, Kr—photo of cotype, Kr—photo of cotype, M—cotype, N—photo of cotype, N—photo of cotype, N—photo of cotype, N—photo of cotype, Si—photo of cotype, W—photo of cotype, W—photo of cotype, Z—photo of cotype). Minas Gerais: A. P. Duarte 7580 [Herb. Brad. 27648] (N); Mendes Magalhães 4329 [Herb. Jard. Bot. Belo Horiz. 45152] (N), 19499 (N). State undetermined: Martius 1037 (M).

LIPPIA VERNONIOIDES Cham., Linnaea 7: 232--234. 1832.

Synonymy: Lippia attenuata Mart., Flora 21, Beibl. 2: 59. 1838. Aloysia attenuata Walp., Repert. Bot. Syst. 4: 42. 1845. Lippia hirsuta f. vernonioides (Cham.) Kuntze, Rev. Gen. Pl. 3 (2): 252. 1898. Lippia caniflora Mart. ex Moldenke, Alph. List Invalid Names Suppl. 1: 13, in syn. 1947. Lippia hirsuta α vernonioides (Cham.) Kuntze ex Moldenke, Résumé Suppl. 9: 4, in syn. 1964. Lippia hirsuta var. vernonioides (Cham.) Kuntze ex Moldenke, Résumé Suppl. 12: 10, in syn. 1965. Lippia hirsuta f. latifolia Kuntze ex Moldenke, Résumé Suppl. 12: 10, in syn. 1965. Lippia hirsuta f. longifolia Kuntze ex Moldenke, Résumé Suppl. 12: 10, in syn. 1965.

Bibliography: Cham., Linnaea 7: 232—234. 1832; Mart., Flora 21, Beibl. 2: 59. 1838; Steud., Nom. Bot., ed. 2, 2: 54. 1840; D. Dietr., Syn. Pl. 3: 600. 1843; Walp., Repert. Bot. Syst. 4: 42 & 54. 1845; Benth., Pl. Hartw. 245. 1846; Schau. in A. DC., Prodr. 11: 589. 1847; Schau. in Mart., Fl. Bras. 9: 244. 1851; Hiern, Vidensk. Meddel. Kjøbenh. 1877—1878: 99. 1877; Jacks. in Hook. f. & Jacks., Ind. Kew. 2: 95. 1894; S. Moore, Trans. Linn. Soc. Lond. Bot., ser. 2, 4: 436. 1895; Kuntze, Rev. Gen. Pl. 3 (2): 252. 1898; H. H. Rusby, Bull. Torrey Bot. Club 27: 80. 1900; Glaz., Bull. Soc. Bot. France 58, Mém. 3: 542. 1911; T. Herzog, Meded. Rijksherbar. Leiden 29: 44. 1916; Moldenke, Lilloa 5: 432. 1940; Moldenke, Suppl. List Invalid Names 1 & 5. 1941; Moldenke, Known Geogr. Distrib. Verbenac., [ed. 1], 37, 38, 40, 95, & 96. 1942; Moldenke, Alph. List Invalid Names 4. 1942; Moldenke, Alph. List Cit. 1: 30, 92, 120, 121, 177, 223, 231, & 289. 1946; Moldenke, Alph. List Invalid Names Suppl. 1: 13. 1947; Moldenke, Phytologia 2: 336. 1947; Moldenke, Lilloa 13: 9 (1947) and 14: 48. 1948; Moldenke, Alph. List Cit. 2: 362, 365—367, 444, 535, 552, 553, 608, & 628 (1948), 3: 690, 704, 705, 709, 751, 846, 856, 884, 923, 966, & 968 (1949), and 4: 1124 & 1292. 1949; Moldenke, Known Geogr. Distrib. Verbenac., [ed. 2], 81, 97, & 191. 1949; F. C. Hoehne, Ind. Bibl. & Num. Pl. Col. Com. Rondon 349. 1951; Moldenke, Phytologia 4: 70. 1952; Moldenke, Résumé 94, 114, 233, 310, 311, 315, & 463. 1959; Moldenke, Phytologia 12: 24, 102, 207, & 224. 1965; Moldenke, Résumé Suppl. 12: 10. 1965.

Shrub or shrublet, 0.8—1.8 m. tall; stems erect, 0.3—0.6 m. tall, simple or forked, tetragonal, hirsute; leaves decussate-opposite or ternate, variable in size and shape; petioles short, hirsute; leaf-blades rigid, ovate or elliptic to oblong, 7.5—10 cm. long, 2.5—4 cm. wide, acute at the apex, crenate-serrate along the margins except at the entire base, acuminate and attenuate or cuneate-attenuate into the petiole at the base, pinninerved, rugose, strigose-hispid or strigose-hirsute above with short callose hairs, paler and subtomentose beneath and hirtous on the venation, the pubescence sometimes more strigose, sometimes more pilose; inflorescence white or grayish-white to greenish-white, terminal, paniculate, cymose, with opposite subdichotomous branches, sometimes loose and pyramidal, sometimes contracted and fastigiate;

heads squarrose, strobiliform, globose or ovoid, many-flowered, 6—8 mm. wide, finally becoming subcylindric and almost 1.5 cm. long, the lateral ones sessile; bractlets imbricate, scale-like, obovate, subrhomboid-rounded toward the apex, mucronate at the apex, incano-holosericeous on the back, cuneate-unguiculate and glabrous toward the base, equaling the corolla-tube; calyx very short, shortly bifid, villose, adherent to the mature fruit; corolla hypocrateriform, white or whitish to yellow-white, sometimes white with a yellow throat or white with a yellow or yellowish to rose center, slightly more than 3 mm. long, villous-pubescent on the outside, the tube clavate-infundibular, the upper lobes of the limb short, the lowest expanded and subquadrate; fruit splitting into 2 seeds, typical of the genus.

The type of this species was collected by Friedrich Sellow in São Paulo, Brazil, and was deposited in the herbarium of the Botanisches Museum at Berlin, where it was photographed by Macbride as his type photograph number 17552, but is now destroyed. Chamisso, in his original description (1832), says merely "*E Brasilia misit Sellow.*" The type of *L. attenuata* was collected by Carl Friedrich Philipp von Martius (no. 224) near Cujaba, Matto Grosso, Brazil, in May, 1833, and is deposited in the herbarium of the Botanisches Museum in Munich. The type of *L. hirsuta* f. *latifolia* was gathered by Carl Ernst Otto Kuntze at an altitude of 400 meters at Yapacani, Santa Cruz, Bolivia, in 1892, and is deposited in the Britton Herbarium at the New York Botanical Garden.

Schauer (1847) places *L. vernonioides* in his Section *Zapania*, Subsection *Paniculatae*. Moore (1895) compares it with his *L. jangadensis*, to which he points out that it is closely related. Steudel (1840) and Walpers (1845) regarded both *L. vernonioides* and *L. attenuata* as valid species.

The plant has been found growing on campos, hilly or dry campos, and on terra firma, among rocks on high campos, in open grassy soil, sandy places at the edge of woods, dryish open grassy places on the ascent of mountains, cerrados near roadsides, dry grassy places, and swampy or rather wet shady places, at altitudes of 200 to 800 meters, blooming from October to July, fruiting in April, June, October, and December. Macedo refers to it as "arbusto campestre pubescente", while Steinbach notes "la flores salen poco a poco en las puntas de las inflorescencias" and also "con raiz tuberculosa leñosa, que crece hasta el tamano de una manzana".

The flowers are described as "yellow-white" on Mendes Magalhães 19025; "white" on A. P. Duarte 778, G. Gehrt s.n., Hoehne & Gehrt s.n., Murça Pires & Black 2146 & 2361, and Steinbach 5581; "white with yellow throat" on Herzog 1484 and Malme 3433a; "white with yellowish center" on Steinbach 7027; "brancas con centro róseo e amarelo" on Macedo 2288; and "brancas com centro amarelo" on Macedo 2292.

In the Instituto Miguel Lillo the Herzog reference given in the bibliography above is cited as "Herzog, Bolivia III (1916) 44" and

the Rusby reference as "Rusby, Bolivia Bulletin XXVII (1900) 80."

Material has been misidentified and distributed in herbaria as Lantana sp. On the other hand, the P. Clausen s.n. [Minas Geraes] distributed in the Dudley Herbarium (no. 166590) as L. vernonioides is actually Hyptis microphylla Pohl in the Lamiaceae.

Schauer (1851) cites a Lund s.n., L. Riedel s.n., and Sellow s.n. from São Paulo, L. Riedel s.n. [in campis siccis prope Barbacenam] from Minas Gerais, and L. Riedel s.n. and Silva Manso s.n. [Herb. Martius 224] from Matto Grosso.

In all, 79 herbarium specimens, including type material of all the names involved, and 9 mounted photographs have been examined by me.

Citations: BRAZIL: Goiás: G. Gardner 3946 (Cb); Murça Pires & Black 2361 (Z). Maranhão: Murça Pires & Black 2146 (N), 2319 (N). Matto Grosso: Herb. Rio de Janeiro 46804 (Ja); F. C. Hoehne Com. Rondon 194 (Sp), 1304 (N); Malme 1692 (S), 3433 (S), 3433a (S); Martius 224 [87] (Br, F--photo, N--photo, Si--photo, Z--photo); Pilger 571 (B). Minas Gerais: A. P. Duarte 778 [Herb. Jard. Bot. Rio Jan. 58834] (N); Hoehne & Gehrt s.n. [Turvo, April 24, 1926] (N, Sp--17475); Macedo 2288 (N), 2292 (N, S); Mendes Magalhães 19025 [Herb. Brad. 28163] (N); Mosén 1993 (S), 4319 (N, S); Regnell III.944 [Caldas, 1845] (S), III.944 [Caldas, 30/1/1865] (S, W--1323001), III.944 [6/11/1870] (W--274925), III.944a (S); A. Saint-Hilaire D.455 (W--2383080); Widgren s.n. [1845] (S). Pará: Murça Pires 2361 (N). São Paulo: Edwall s.n. [Morro Pellado, June 1904] (N, Sp--8351); G. Gehrt s.n. [Itarapina, April 30, 1923] (N, Sp--8351); F. C. Hoehne s.n. [Mogy-mirim, May 21, 1927] (N, N, Sp--20411); W. Hoehne 2709 (Bh, It, Ml, N, Qu, Ug, W); Kiehl s.n. [Herb. Inst. Agron. Est. 3764] (N, Sp--41982); Riedel & Lund 2073 (N); Sellow s.n. [Brasilia; Macbride photos 17552] (It--photo of type, Kr--photo of type, N--photo of type, N--photo of type, W--photo of type). State undetermined: J. E. Pohl s.n. [Brasiliae; Com. Mus. Caes. Vindob. 1839] (Br). BOLIVIA: El Beni: Fleischmann 306 (S); H. H. Rusby 927 (C, Pa, Pa, Pr, Pr, W--72953). La Paz: M. Cárdenas 1935 (N); H. H. Rusby 926 (C). Santa Cruz: M. Cárdenas 2028 (N); T. Herzog 1484 (S); Kuntze s.n. [Prov. Velasco, VII.92] (N, N, W--701988), s.n. [Yapacani, 1892] (N); Peredo s.n. [Los Arroyitos, 6.XII.1946] (N, S); Steinbach 2074 (Ra--33058), 5581 [Herb. Osten 17922] (N, Ug), 6306 (A), 7027 (Ca--368480, N, N, S, Ut--91356).

LIPPIA VILLAFLORIDANA Kuntze, Rev. Gen. Pl. 2 (3): 253—254. 1898.

Synonymy: Lippia floridana Kuntze ex Moldenke, Suppl. List Invalid Names 5, in syn. 1941. Lippia verticillata Legrand ex Moldenke, Résumé 318, in syn. 1959. Lippia villafloridans Kuntze ex Moldenke, Résumé 318, in syn. 1959.

Bibliography: Kuntze, Rev. Gen. Pl. 2 (3): 253—254. 1898; Thiselt.-Dyer, Ind. Kew. Suppl. 2: 106. 1904; Moldenke, Torreya 34: 9. 1934; Moldenke, Suppl. List Invalid Names 5. 1941; Moldenke, Known Geogr. Distrib. Verbenac., [ed. 1], 41 & 96. 1942; Moldenke, Alph. List Invalid Names 30. 1942; Moldenke, Lilloa 8: 427 (1942) and 14: 48. 1948; Moldenke, Alph. List Cit. 2: 627 (1948) and 3: 690. 1949; Moldenke, Known Geogr. Distrib. Verbenac., [ed. 2], 99 & 191. 1949; Moldenke, Phytologia 3: 289 & 376. 1950; Moldenke, Résumé 94, 117, 119, 312, 318, & 463. 1959; Troncoso, Bol. Soc. Argent. Bot. 9: 184. 1961; Rambo, Pesquis. Bot. 21: 28-29 & [59]. 1965; Moldenke, Phytologia 12: 92 & 136 (1965) and 13: 29. 1966.

Dioecious perennial shrub or subshrub, very small, 10—15 cm. tall, few-branched, only the lowest portion woody; branches herbaceous, 5—10 cm. long; leaves 4—6, decussate-opposite or approximate, ovate, nigrescent in drying, to 3.5 cm. long and 1.5 cm. wide, cuneate at the base, incised-dentate along the margins, penninerved, strigose; peduncles axillary, very long, 2—4 times as long as the subtending leaves; heads subglobose, to 20-flowered, 4—6 mm. wide; bractlets lanceolate or ovate, acute at the apex, strigose, the ordinary hair intermixed with smaller glandularious hairs, subequaling the flowers; calyx very small, repand 4-dentate; corolla hypocrateriform, yellow or clear-yellow, the tube conic, the limb oblique, 4-lobed, one of the lobes larger than the others; stigma obliquely bilobed; fruit pubescent but scarcely glandulose on the outside, splitting spontaneously into 2 cocci on maturity.

The type of this species was collected by Carl Ernst Otto Kuntze at Villa Florida, Paraguay, on October 2, 1892, and is deposited in the Britton Herbarium at the New York Botanical Garden — an isotype deposited in the herbarium of the Botanisches Museum at Berlin was photographed there by Macbride as his type photograph number 17553, but is now destroyed. The type of L. verticillata was collected by Carlos María Diego Enrique Legrand (no. 4524) in rocky ground at Río Yi, department of Florida, Uruguay, on November 2, 1946, and is deposited in the herbarium of the Museo Nacional at Montevideo.

The species has been found growing in meadows and quebradas, on rocky and dry grassy campos, between arroyos, and on rocky ground, flowering in January, March, April, and November, fruiting in January. The flowers are described as "yellow" on Gallinal, Aragone, Bergalli, Campal, & Rosengurtt PE.5171, Rambo 3033, and Rosengurtt B.4581, and as "clear-yellow" on Legrand 4524. Material has been misidentified and distributed in herbaria under the names L. imbricata Kuntze and L. turnerifolia Cham.

Kuntze (1898) says "Der Kelch ist ziemlich flach und ausgeschweisst gezähnt, sodass dieses Material nicht zur Trennung von Lantana Camara durchgreifend ist." Rambo (1965) cites his collection in Herb. Anchieta 3033 from Rio Grande do Sul, Brazil.